CFPT-69, -77 SMD TCXO

ISSUE 1 ; 2 DECEMBER 2009 - RoHS 2002/95/EC

Description

- Surface mount temperature compensated crystal oscillator (TCXO) in a miniature ceramic package

Package Outline

- 2.5 x 2.0mm

Standard Frequencies

- 13.0, 16.368, 16.369, 19.2, 26.0, 27.456, 38.4MHz

Output Compatibility & Load

- Clipped Sine 0.8V pk-pk minimum, 10kΩ // 10pF ±10%

Harmonics

- -5dBc maximum

Frequency Stability

- Temperature (see table)
- Tolerance ±2.0ppm @ 25°C ±2°C
- Supply Voltage Variation ±0.2ppm maximum
- Load Variation ±0.1ppm maximum
- Ageing ±1ppm maximum per year @ 25°C ±2°C

Operating Temperature Range

- –30 to 85°C

Storage Temperature Range

- –40 to 85°C

Supply Voltages

- 3.0V ±5% CFPT-69
- 1.8V ±5% CFPT-77

Phase Noise (typical)

- -80dBc/Hz @ 10Hz
- -105dBc/Hz @ 100Hz
- -130dBc/Hz @ 1kHz
- -145dBc/Hz @ 10kHz

Environmental

- Drop: natural drop from 150cm onto a hard board, 3 times in each mutually perpedicular axis.
- Vibration: 10 to 55 to 10Hz, 1.5mm amplitude, 1 min sweep rate, 3 times in each axis, 2hrs duration per axis
- MSL 1
- Reflow Soldering Temp 260°C max for 10sec max
- Washing not recommended

Marking Includes

- Batch code

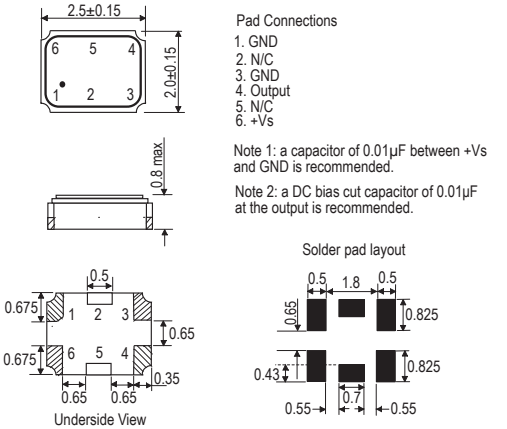
Packaging

- Loose in bulk pack or tape and reel to EIA-481

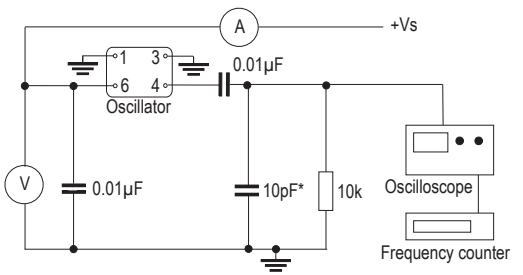
Minimum Order Information Required

- Frequency + Model Number + Operating Temperature Code + Frequency Stability

Outline (mm)



Test Circuit



*Inclusive of jigging and equipment capacitance

IQD Frequency Products Ltd, Station Road, Crewkerne, Somerset TA18 8AR, United Kingdom
Tel: +44 (1460) 270200; Fax: +44 (1460) 72578;
Email: info@iqdfrequencyproducts.com Web: www.iqdfrequencyproducts.com

Electrical Specification - maximum limiting values

Frequencies	Frequency Tolerance @ 25°C	Supply Voltage	Supply Current	Output Waveform	Output	Model Number
13.0, 16.368, 16.369, 19.2, 26.0, 27.456, 38.4MHz	±2.0ppm	3.0V ±5%	2mA	Clipped Sine	0.8V pk-pk min	CFPT-69
		1.8V ±5%				CFPT-77

Frequency Stabilities over Operating Temperature Range

Operating Temperature Range	Frequency Stabilities v Operating Temperature Range	
	±0.5ppm	±2.0ppm
–30 to 85°C	Code EW	Code GW

Ordering Example 13.0MHz CFPT-69 GW
Frequency
Model No.
Frequency Stability vs Operating Temperature Code

Other frequencies may be available, please contact our sales office.

IQD Frequency Products Ltd, Station Road, Crewkerne, Somerset TA18 8AR, United Kingdom
Tel: +44 (1460) 270200; Fax: +44 (1460) 72578;
Email: info@iqdfrequencyproducts.com Web: www.iqdfrequencyproducts.com